Abstract

Dyed yarns typically have inferior color fastness compared with pigmented yarns. However, dyeing offers a virtually infinite selection of colors, flexibility and more uniformity than constructions of pigmented yarns in residential carpet and other yarn applications, such as apparel. It has been found that relatively small amounts of pigment (10 to 1000 ppm) incorporated into polymeric fibers, and particularly nylon fibers used in carpets, creates lightly pigmented yarns which, when overdyed, are highly uniform and have a higher degree of apparent dye light fastness compared to normal dyed yarns. This effect is observable for both anionic and cationic polyamide polymers, and dyeing of these slightly pigmented yarns can be conducted to produce yarns of almost any color of greater depth than the base yarn.